

ABSTRACT OF THE DISCLOSURE

A multi-beam scanning optical apparatus includes an incident optical system for making a plurality of light beams emitted from light source means having a 5 plurality of light emitting portions incident on a deflector, and a scanning optical system for forming images of the plurality of light beams deflected by the deflector on a surface to be scanned. The scanning optical system has at least one scanning optical 10 element made of a resin. The scanning optical element made of the resin has birefringence due to a stress distribution generated upon cooling in a molding process thereof such that the directions of principal axes of birefringence at one end portion of the 15 scanning optical element are different from those at the other end portion, opposite to the one end portion with respect to an optical axis thereof in a main scanning direction, of the scanning optical element. An interval between adjacent scanning lines formed on the 20 scanning surface by the plurality of light beams whose images are formed on the scanning surface through the scanning optical element made changes in the main scanning direction in an effective scanning region. In the apparatus, a sub-scanning interval error between 25 the scanning lines due to a polarization angle difference between the light beams emitted from the plurality of light emitting portions is so set as to be not more than 1/5 of a desired scanning line interval.

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